

APPLICATION

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FOR UNITED STATES LETTERS PATENT

SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

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BE IT KNOWN THAT I, **Jeffrey D. Jacobson**, a citizen of the United States,
have invented a new and useful ski system of which the following is a specification:

Ski System

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BACKGROUND OF THE INVENTION

10 Cross-Reference to Related U.S. Patent Application

I hereby claim benefit under Title 35, United States Code, Section 120 of United States patent application Serial Number 09/687,958 filed 10/12/2000. This application is a continuation-in-part of the 09/687,958 application. The 09/687,958 application is currently pending. The 09/687,958 application is hereby incorporated by reference into this application.

Field of the Invention

The present invention relates generally to snow skiing and more specifically it relates to a ski system for allowing an individual to travel upwardly upon a steep incline while allowing them to travel downwardly in a forward motion as conventional skis.

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Description of the Prior Art

Snow skis have been in use for years. Typically, a snow ski is constructed for allowing forward motion that is used in downhill or cross-country situations. Some
5 skis even prevent reverse motion for ease of walking without removing the ski by utilizing complex mechanical structures.

One of the problems with the previously mentioned anti-reverse ski is that they are often clumsy and difficult to operate, especially to young children who have an
10 interest in skiing. Another problem with the prior art is that by adding devices to prevent reverse motion there is added weight and cost, making the prior art impractical to a wide variety of skiers.

Examples of patented snow skis which are illustrative of such prior art include
15 U.S. Patent 5,577,754 to Hwu; U.S. Patent 3,858,894 to Ver et al.; U.S. Patent 4,919,447 to Jackson et al.; U.S. Patent 4,705,290 to Gratz et al.; U.S. Patent 4,431,209 to Volkl et al.; U.S. Patent 4,223,909 to Danner et al.; U.S. Patent 4,118,050 to Schnurrenberger; U.S. Patent 1,714,352 to Echola.

20 While these devices may be suitable for the particular purpose to which they address, they are not as suitable for allowing a ski to slide in forward motion and grip in backward motion for a variety of people in a cost effective manner. One of the problems with the previously mentioned anti-reverse ski is that they are often clumsy and difficult to operate, especially to young children who have an interest in skiing.
25 Another problem with the prior art is that by adding devices to prevent reverse motion there is added weight and cost, making the prior art impractical to a wide variety of skiers.

In these respects, the ski system according to the present invention substantially
departs from the conventional concepts and designs of the prior art, and in so doing
provides an apparatus primarily developed for the purpose of allowing a ski to slide in
forward motion and grip in backward motion for a variety of people in a cost effective
5 manner.

SUMMARY OF THE INVENTION

In view of the foregoing disadvantages inherent in the known types of snow
5 skis now present in the prior art, the present invention provides a new ski system
construction wherein the same can be utilized for allowing a ski to slide in forward
motion and grip in backward motion for a variety of people in a cost effective manner.

The general purpose of the present invention, which will be described
10 subsequently in greater detail, is to provide a new ski system that has many of the
advantages of the snow skis mentioned heretofore and many novel features that result
in a new ski system which is not anticipated, rendered obvious, suggested, or even
implied by any of the prior art snow skis, either alone or in any combination thereof.

To attain this, the present invention generally comprises a flat base member
15 having an upper surface and a lower surface, a plurality of gripping members
extending from the lower surface of the base member, and a securing structure
attached to the upper surface of the base member for securing a shoe of a user. The
gripping members each have a front portion having a downwardly angled structure.
20 The gripping members each include a rear portion that extends upwardly from the
lower end of the front portion towards the lower surface of the base member. The
gripping members preferably have a U-shaped cross sectional shape.

There has thus been outlined, rather broadly, the more important features of the
25 invention in order that the detailed description thereof may be better understood, and
in order that the present contribution to the art may be better appreciated. There are
additional features of the invention that will be described hereinafter and that will form
the subject matter of the claims appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other
5 embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of the description and should not be regarded as limiting.

A primary object of the present invention is to provide a ski system that will
10 overcome the shortcomings of the prior art devices.

A second object is to provide a ski system for allowing a ski to slide in forward motion and grip in backward motion thereby making walking possible.

Another object is to provide a ski system that is easy to operate for people of all
15 ages and sizes.

An additional object is to provide a ski system that is affordable to people of all
20 ages and sizes.

A further object is to provide a ski system that is lightweight and durable.

Another object is to provide a ski system that children can easily learn to ski
with.
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Other objects and advantages of the present invention will become obvious to the reader and it is intended that these objects and advantages are within the scope of the present invention.

To the accomplishment of the above and related objects, this invention may be embodied in the form illustrated in the accompanying drawings, attention being called to the fact, however, that the drawings are illustrative only, and that changes may be made in the specific construction illustrated and described within the scope of the
5 appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

5 Various other objects, features and attendant advantages of the present invention will become fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views, and wherein:

10 FIG. 1 is an upper perspective view of the present invention with a shoe positioned within.

FIG. 2 is a lower perspective view of the present invention.

15 FIG. 3 is a side view of the present invention.

FIG. 4 is a top view of the present invention.

20 FIG. 5 is a bottom view of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Turning now descriptively to the drawings, in which similar reference characters denote similar elements throughout the several views, FIGS. 1 through 5 illustrate a ski system **10**, which comprises a flat base member **20** having an upper surface **26** and a lower surface **28**, a plurality of gripping members **40** extending from the lower surface **28** of the base member **20**, and a securing structure **30** attached to the upper surface of the base member **20** for securing a shoe of a user. The gripping members **40** each have a front portion **42** having a downwardly angled structure. The gripping members **40** each include a rear portion **44** that extends upwardly from the lower end of the front portion **42** towards the lower surface **28** of the base member **20**. The gripping members **40** preferably have a U-shaped cross sectional shape.

As shown in Figures 1 through 3 of the drawings, the base member **20** is comprised of a broad and elongated structure having an upper surface **26** and a lower surface **28**. In use, one base member **20** will be attached upon each shoe **12** of an individual with the securing structure **30**. The base member **20** in addition includes a rear end and front end as shown in Figure 3 of the drawings. The front end of the base member **20** includes a front lip **24** that curves upwardly to allow gliding of the base member **20** upon snow and ice without catching within. The base member **20** may be comprised of any lightweight, durable material such as plastic, aluminum or fiberglass.

As shown in Figures 1 and 4 of the drawings, a first sidewall **21** and a second sidewall **23** extend upwardly from the upper surface **26** of the base member **20** in a substantially parallel manner. The sidewalls **21**, **23** each include a plurality of apertures **25** within for selectively receiving the straps **32**, **34** to secure shoes **12** of various sizes. The sidewalls **21**, **23** extend a finite distance upwardly as shown in Figure 3 of the drawings. The apertures **25** each are preferably comprised of a narrow

structure for receiving the straps **32, 34** as best illustrated in Figures 1 through 3 of the drawings.

As shown in Figures 1 through 3 of the drawings, a plurality of gripping members **40** extend downwardly from the base member **20** with respect to the lower surface **28**. The plurality of gripping members **40** preferably have a U-shaped or a semi-circular cross sectional shape, however various other shapes and designs may be utilized to construct the gripping members **40**. The plurality of gripping members **40** are preferably aligned into three parallel rows as best shown in Figures 1, 2, 4 and 5 of the drawings.

The gripping members **40** each include a front portion **42** and a rear portion **44** as best shown in Figure 1 of the drawings. The front portion **42** of the gripping members **40** is tapered upwardly and forwardly toward the lower surface **28** of the base member **20** to allow forward gliding upon a snow or ice surface as shown in Figure 1 of the drawings.

The rear portion **44** of the gripping member is preferably tapered sharply upwardly to the lower surface **28** of the base member **20**. The rear portion **44** is preferably a solid structure to prevent snow from entering through the base member **20**. However, the rear portion **44** may alternatively be comprised of an open structure to allow snow, ice and debris to freely exit from the gripping members **40** during use. As best shown in Figure 3 of the drawings, the rear portion **44** preferably is angled forwardly to assist in the gripping of snow or ice during a forward movement and for preventing rearward movement of the base member **20** upon a snow or ice surface.

As shown in Figures 1, 2, 4 and 5 of the drawings, a securing structure **30** is attached to the upper surface **26** of the base member **20** to allow selective securing of a shoe **12** to the base member **20**. The securing structure **30** is comprised of a receiver

structure 36, a first strap 32, and a second strap 34. The receiver structure 36 is comprised of a tapered structure formed for receiving the rear portion of a shoe 12 as best shown in Figure 1 of the drawings. The receiver structure 36 may be comprised of a rigid, semi-rigid or flexible material.

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The first strap 32 is attached to the first sidewall 21 within one of the respective apertures 25 as shown in Figure 1 of the drawings. The first strap 32 preferably has an elongate structure for covering the front portion of the shoe 12 as shown in Figure 1 of the drawings. The second strap 34 is attached to the second sidewall 23 within one of the respective apertures 25 as also shown in Figure 1 of the drawings. A fastener is attached to the distal ends of the straps 32, 34 for allowing selective engagement of the straps 32, 34 about the shoe 12. The fastener may be comprised of a hook and loop fastener or other well-known fastener system.

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As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

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With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed to be within the expertise of those skilled in the art, and all equivalent structural variations and relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

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Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction

and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

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